

Work Order I 121255

121255

June-19-14

Page 1

Item ID:

Revision ID:

Item Name:

Draw Nbr:

Start Date: 6/19/14 11:19 Start Qty: 1.00

* 1 *

Revision Nbr

Required Date: 6/19/14 11:20 Reqd Qty: 1.00

* 1 *

Reference: ECN14-569

Cust Item ID:

Customer ID:

Description: update kits in stk per ECN14-569 - SB11-2 REV.D
D412-664 / D212-664

Sales Order:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Hours

Sequence
in

Work Center
in

Operation
Description

Set Up

Run

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

DAS
06
9-89

JUN 25 2014

QC21 - 14/07/14

W 14.07.11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		
<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

List Lots

Page 1 of 4

June-04-14 9:24:44 AM

Criteria : Item ID: 'D212-664-101', 'D212-664-101MB', 'D212-664-101TRN', 'D212-664-107', 'D212-664-107RevA', 'D212-664-107TRN', 'D212-664-201', 'D212-664-201MB', 'D212-664-201TRN', 'D212-664-207', 'D212-664-207RevA', 'D212-664-207TRN' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D212-664-101 Fwd Crosstube - High	OFFSHORE FG	111386	5/29/14	1.0000		QC21	CHG005	
			Total:	1.0000				
D212-664-101TRN Crosstube Turning Detail	Main Warehouse LG	119585	6/03/14	1.0000		QC21		
	Main Warehouse LG	119586	6/03/14	1.0000		QC21		
	Main Warehouse LG	119587	6/03/14	1.0000		QC21		
	Main Warehouse LG	119867	6/03/14	1.0000		QC21		
			Total:	4.0000				
D212-664-107 Fwd Crosstube - Low Standard	Main Warehouse FG094	107430	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109606	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109876	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109877	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109878	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109879	2/04/14	1.0000		QC21	CHG002	
	Main Warehouse FG094	109880	2/04/14	1.0000		QC21	CHG002	

DAS
06
9-89

JUN 25 2014

List Lots

Page 2 of 4

June-04-14 9:24:44 AM

Criteria : Item ID: 'D212-664-101', 'D212-664-101MB', 'D212-664-101TRN', 'D212-664-107', 'D212-664-107RevA', 'D212-664-107TRN', 'D212-664-201', 'D212-664-201MB', 'D212-664-201TRN', 'D212-664-207', 'D212-664-207RevA', 'D212-664-207TRN' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D212-664-107 Fwd Crosstube - Low Standard	Main Warehouse FG094	109881	2/04/14	1.0000		QC21		
				Total:	8.0000			
D212-664-107TRN Crosstube Turning Detail	Main Warehouse LG	107535	1/10/14	1.0000		QC21		
	Main Warehouse LG014	107097	1/10/14	1.0000		qc21		
	Main Warehouse LG014	107098	1/10/14	1.0000		QC21		
	Main Warehouse LG014	110486	1/10/14	1.0000		QC21		
	Main Warehouse LG014	110487	1/10/14	1.0000		QC21		
				Total:	5.0000			
D212-664-201 Aft Crosstube - High	Main Warehouse FG	15483	5/08/14	1.0000				
	OFFSHORE FG	100942	5/08/14	1.0000		QC21	CHG005	
	OFFSHORE FG	102501	5/08/14	1.0000		QC21	CHG005	
				Total:	3.0000			
D212-664-201TRN Crosstube Turning Detail	Main Warehouse LG	112779	6/02/14	1.0000		QC21		
	Main Warehouse LG	112781	6/02/14	1.0000		QC21		

June-04-14 9:24:44 AM

List Lots

Page 2 of 4

List Lots

June-04-14 9:24:44 AM

Page 3 of 4

Criteria : Item ID: 'D212-664-101', 'D212-664-101MB', 'D212-664-101TRN', 'D212-664-107', 'D212-664-107RevA', 'D212-664-107TRN', 'D212-664-201', 'D212-664-201MB', 'D212-664-201TRN', 'D212-664-207', 'D212-664-207RevA', 'D212-664-207TRN' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D212-664-201TRN Crosstube Turning Detail	Main Warehouse	116152	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119098	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119099	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119100	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119101	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119706	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119707	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119708	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119710	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	119711	6/02/14	1.0000		QC21		
	LG							
	Main Warehouse	116153	6/02/14	1.0000		QC21		
	LG003							
Total:				13.0000				
D212-664-207 Aft Crosstube - Low Standard	Main Warehouse	107383	12/30/13	1.0000		QC21	CHG002	
	FG094							
	Main Warehouse	107431	12/30/13	1.0000		QC21	CHG002	
	FG094							

JUN 25 2014

DAS
06
9-59

June-04-14 9:24:44 AM

List Lots

Page 3 of 4

List Lots

June-04-14 9:24:44 AM

Page 4 of 4

Criteria : Item ID: 'D212-664-101', 'D212-664-101MB', 'D212-664-101TRN', 'D212-664-107', 'D212-664-107RevA', 'D212-664-107TRN', 'D212-664-201', 'D212-664-201MB', 'D212-664-201TRN', 'D212-664-207', 'D212-664-207RevA', 'D212-664-207TRN' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D212-664-207 Aft Crosstube - Low Standard	Main Warehouse FG094	108898	12/30/13	1.0000		QC21	CHG002	
	Main Warehouse FG094	108899	12/30/13	1.0000		QC21	CHG002	
	Main Warehouse FG094	109314	12/30/13	1.0000		QC21	CHG002	
	Main Warehouse FG094	109315	12/30/13	1.0000		QC21	CHG002	
	Main Warehouse FG094	96730	12/30/13	1.0000		QC21	CHG002	
Total:				7.0000				
D212-664-207TRN Crosstube Turning Detail	Main Warehouse LG	109641	1/09/14	1.0000		QC21		
	Main Warehouse LG014	109642	1/09/14	1.0000		QC21		
Total:				2.0000				

DAS
05
9-88

14
JUN 25 2014

June-04-14 9:24:44 AM

List Lots

Page 4 of 4

List Lots

Page 1 of 4

June-04-14 9:24:57 AM

Criteria : Item ID: 'D412-664-105', 'D412-664-105TRN', 'D412-664-203', 'D412-664-203TRN', 'D412-664-205', 'D412-664-205TRN', 'D412-664-209', 'D412-664-209TRN', 'D412-664-301' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D412-664-105 Fwd Crosstube - Low Narrow	Main Warehouse FG094	101996	12/04/13	1.0000		QC21	CHG004	
	Main Warehouse FG094	101998	12/04/13	1.0000		QC21	CHG004	
	Main Warehouse FG094	39535	12/17/13	2.0000		QC21	CHG001	
Total:				4.0000				
D412-664-105TRN Crosstube Turning Detail	Main Warehouse LG014	109151	12/05/13	1.0000		QC21		
	Main Warehouse LG014	109152	12/05/13	1.0000		QC21		
Total:				2.0000				
D412-664-203 Aft Crosstube - High	Main Warehouse FG103	110857	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG103	115345	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG103	116608	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG103	116610	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG103	116611	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	114223	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	114634	5/26/14	1.0000		QC21	CHG009	

DAS
06
9-89

JUN 25 2014

DAS
06
9-89

JUN 25 2014

List Lots

June-04-14 9:24:57 AM

Page 2 of 4

Criteria : Item ID: 'D412-664-105', 'D412-664-105TRN', 'D412-664-203', 'D412-664-203TRN', 'D412-664-205', 'D412-664-205TRN', 'D412-664-209TRN', 'D412-664-209TRN', 'D412-664-301' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D412-664-203 Aft Crosstube - High	Main Warehouse FG113	114636	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	114826	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	114827	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	115203	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	115204	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	115205	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	115206	5/26/14	1.0000		QC21	CHG009	
	Main Warehouse FG113	115291	5/26/14	1.0000		QC21	CHG009	
	OFFSHORE FG	106075	5/26/14	1.0000		QC21	CHG009	
	OFFSHORE FG	107612	5/26/14	1.0000		QC21	CHG009	
	OFFSHORE FG	107613	5/26/14	1.0000		QC21	CHG009	
	OFFSHORE FG	110856	5/26/14	1.0000		QC21	CHG009	
Total:				19.0000				
D412-664-203TRN Crosstube Turning Detail	Main Warehouse LG	115330	4/09/14	1.0000		QC21		

JUN 25 2014

DAS
06
9-89

June-04-14 9:24:57 AM

List Lots

Page 2 of 4

List Lots

Page 3 of 4

June-04-14 9:24:57 AM

Criteria : Item ID: 'D412-664-105', 'D412-664-105TRN', 'D412-664-203', 'D412-664-203TRN', 'D412-664-205', 'D412-664-205TRN', 'D412-664-209', 'D412-664-209TRN', 'D412-664-301' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
			Total:	1.0000				
D412-664-205	Main Warehouse	102003	4/09/14	1.0000		QC21	CHG004	
Aft Crosstube - Low Narrow	FG104							
	Main Warehouse	76244	4/09/14	1.0000		QC21	CHG004	
	FG104							
	Main Warehouse	76245	4/09/14	1.0000		QC21	CHG004	
	FG113							
			Total:	3.0000				
D412-664-205TRN	Main Warehouse	102004	11/20/13	1.0000		QC21		
Crosstube Turning Detail	LG014							
	Main Warehouse	102006	11/20/13	1.0000		QC21		
	LG014							
	Main Warehouse	42705	11/15/13	1.0000		QC21		
	LG014							
	Main Warehouse	43867	11/15/13	1.0000		QC21		
	LG014							
			Total:	4.0000				
D412-664-209	Main Warehouse	101749	12/18/13	1.0000		QC21	CHG004	
Aft Crosstube - Low	FG104							
Standard								
	Main Warehouse	109058	12/18/13	1.0000		QC21	CHG004	
	FG104							
	Main Warehouse	109059	12/18/13	1.0000		QC21	CHG004	
	FG104							
	Main Warehouse	112803	2/19/14	1.0000		QC21		
	FG104							
			Total:	4.0000				

DAS
06
9-89

JUN 25 2014

June-04-14 9:24:57 AM

List Lots

Page 3 of 4

List Lots

Page 4 of 4

June-04-14 9:24:57 AM

Criteria : Item ID: 'D412-664-105', 'D412-664-105TRN', 'D412-664-203', 'D412-664-203TRN', 'D412-664-205', 'D412-664-205TRN', 'D412-664-209', 'D412-664-209TRN', 'D412-664-301' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D412-664-209TRN Crosstube Turning Detail	Main Warehouse LG014	109060	1/09/14	1.0000		QC21		
	Main Warehouse LG014	109061	1/09/14	1.0000		QC21		
		Total:		2.0000				
D412-664-301 Cap Assembly Bumper	Main Warehouse FG124	108095	1/17/14	1.0000		QC21	CHG001	
	Main Warehouse FG124	111773	5/29/14	4.0000		QC21	CHG001	
		Total:		5.0000				

DAS
06
9-89

JUN 25 2014

June-04-14 9:24:57 AM

List Lots

Page 4 of 4

ENGINEERING CHANGE NOTICE

DART AEROSPACE LTD

Date: 14.05.26	Job No.:	ADR Yes/No: N	ADR Date:	ECN #: 14- 569
Product No.: D212-664		Created By: DB	Approved By: <i>[Signature]</i>	
Product Name: CROSSTUBES		Checked By: <i>[Signature]</i>		

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)	Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	Y	NF		DQA / QA Coord.	Y	PS	
Production Manager / Coord.	Y	MB/MF		QC Coordinator	Y	ED	
Purchasing Coord.	N	CL		Customer Support	Y	SW/LM	
Production Engineering Coord.	N	DD/JLM		Customer Technical Support	Y	MB/HS	
Production Engineering Coord.	N	DL		Marketing Manager	Y	KO	
Customer Order Processing	N	RM/CC		Sales Support Manager	Y	NM	

Reason for Change:
REPLACEMENT CROSSTUBES NO LONGER OFFERED AT DISCOUNT

Documents Affected:
SB11-2 REV D,

12/25

IF APPLICABLE: NCR: _____ PAR: _____ CAR: _____

PAPERWORK UPDATE ☒ PARTS MUST COMPLY ☐ PREVIOUS PARTS SATISFACTORY ☒

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3					

#	Engineering Actions	Reqd	Resp	Notes	Complete
4	Required Documents/Drawings/Item ID's Under Review (URF)	N			
5	Update Master Document List (MDL)	N		See Below	
6	Update Document Record (DR)	N			
7	Update Product Compatability Matrix	N			
8	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
9					

#	Document Control Actions	Reqd	Resp	Notes	Complete
10	Move / Update Electronic Files / Design Journal	Y	KJ		
11	Update Product Specification Files (Bluefiles)	Y	KJ		
12	Update Approved/Preliminary Dwg PDF Files	Y	KJ		
13	Update Product Development Summary (STC applications)	N			
14	Update QSI 021 (TC/FAA STC) and/or STC Approval List	N			
15	Create/Update Parts / STC Database	N			
16	Update / Verify Airworthiness Release Certificate Database	N			
17	Create / Update Change Record Form / Item Card Database	N			
18	Create / Update Packaging Process Plan (PPP)	N			
19	Red Decals required on Packaging Process Plan (PPP)?	N			
20	Update Controlled Supplier Documents (Qpulse) Database	N	<i>[Signature]</i>		
21	Update Grey Project Binder / Electronic Project Folder	Y	KJ		
22	Update D-Part / M-Drawing / DSI / DEO Master Binders	Y	KJ		
23	Manufacturing Licensing Agreement Update	N			
24					

Description / Action:
MDL to be updated with next revision to this project

UPDATE KITS IN STOCK, FOR D212-664-101 & D412-664-203 WITH
\$ IN PROGRESS

SB11-2 Rev. D

ECN Verified & Complete: _____ Date: _____